IN THE CLAIMS

Please amend the claims as follows:

Claims 1-24 (Canceled)

Claim 25 (Currently Amended): A method for depositing a thin film on a substrate, the method comprising:

heating the substrate at a temperature below 250°C;

introducing a pre-vaporized reactive titania CVD precursor into a gas flow flowing through a coating region;

applying energy to generate an atmospheric pressure glow discharge plasma in the coating region and using the atmospheric pressure glow discharge plasma as a major source of reaction to deposit the thin film on the substrate heated at the temperature below 250°C; and

performing a post treatment on the thin film using an atmospheric glow discharge plasma to modify properties and structure of the thin film;

wherein a water vapor level is controlled to be ~~below~~ from 0.05% to 1%.

Claim 26 (Cancelled)

Claim 27 (Previously Presented): A method according to claim 25, wherein the post treatment modifies the stoichiometry of the thin film allowing control of film properties.

Claim 28 (Previously Presented): A method according to claim 25, wherein the gas flow flowing into and through the coating region is a laminar flow.

Claim 29 (Previously Presented): A method according to claim 25, further comprising providing an extraction system to control gas flow through the coating region which supports controlled flow.

Claim 30 (Previously Presented): A method according to claim 25, further comprising providing a thermal control system in the coating region to maintain the substrate temperature at a desired level, wherein said thermal control system utilizes gas coolant, water coolant, liquid coolant, or combinations thereof.

Claim 31 (Previously Presented): A method according to claim 30, wherein the thermal control system is configured to cool the coating region to reduce unwanted side reactions.

Claim 32 (Previously Presented): A method according to claim 25, wherein the reactive titania CVD precursor which is introduced in the coating region is an alkoxide of titanium or titanium tetrachloride.

Claim 33 (Previously Presented): A method according to claim 25, wherein the thin film is deposited with a uniformity of at least +/- 5 %.

Claim 34 (Previously Presented): A method for depositing a thick film or layers of different composition on a substrate using the method according to claim 25 by arranging sequential coating regions along a direction of movement of the substrate.

Claim 35 (Previously Presented): A method of coating a substrate using the method according to claim 25 in combination with a different depositing method.

Claim 36 (Previously Presented): A method according to claim 25, wherein the glow discharge plasma is generated, between electrodes, by a low frequency source in which the frequency is 30 KHz.

Claim 37 (Previously Presented): A method according to claim 36, wherein the electrodes are selected from a material that reduces heat generation.

Claim 38 (Previously Presented): A method according to claim 36, wherein the electrodes are made of brass.

Claim 39 (Previously Presented): A method according to claim 25, wherein power density of the plasma is below 0.5 Wcm^{-2}.

Claim 40 (Previously Presented): A method according to claim 25, wherein a peak growth rate of the thin film on the substrate is over 100 nm per second.

Claim 41 (Previously Presented): A method according to claim 25, wherein the thin film is deposited on preformed and/or thermally toughened substrates.

Claim 42 (Previously Presented): A method according to claim 25, wherein the thin film is deposited on temperature sensitive substrates including thermally preformed substrates and plastic substrate materials.

Claim 43 (Previously Presented): A method according to claim 25, wherein a level of water and oxygen are controlled to achieve target growth rates and to control unwanted side reactions, the oxygen level being below 1%, the water vapour levels being controlled below 0.1%.

Claim 44 (Currently Amended): A method according to claim 43, wherein the substrate upon which the thin film is deposited on is a single moving substrate of a continuous film or sheet, or a series of separate moving substrates ~~supplied semi-continuously~~.

Claim 45 (Previously Presented): A method according to claim 25, further comprising providing one or more gas flushing zones to allow introduction and removal of the substrate from the coating region while maintaining integrity of the gas composition in the coating region.

Claim 46 (Withdrawn): A substrate obtained by a method according to claim 25, wherein the thin film is photo-active, demonstrated by its ability to destroy organic materials on a surface thereof and/or to modify surface energy on irradiation with UV or visible light.

Claim 47 (Withdrawn): A substrate according to claim 46, wherein the thin film has a degree of crystallinity.

Claim 48 (Withdrawn): A substrate according to claim 46, wherein the thin film has an optical quality suitable for use on substrates required to be substantially transparent to the human eye and to be looked through.